The Road Ahead

Birth Defects Reporting and HER

NBDPN Annual Conference
Topics

- Michigan Experience
  - Health Information Exchange
  - Meaningful Use
- Cancer Surveillance Successes
  - Work to Position for EHR
- Challenges
  - What need we do
State of Michigan Health Information Exchange (SOM HIE)

Enabling interoperability between the Department of Community Health’s internal health information systems and its external partners to improve the health care quality, efficiency and coordination for Michigan citizens.
A public and private nonprofit collaboration

MiHIN is Michigan’s Central Connection
- Sub-State Health Information Exchanges
- The State of Michigan Internal HIE
- Federal and Interstate Health Exchange
Current Public Health Information Exchange In Michigan
The MiHIN Shared Services Model of Public Health Information Exchange in Michigan
In 2005 one HIE initiative was forming:
- Capital Area RHIO

In 2007-2008 the State of Michigan provided funding for nine HIE initiatives:
- Upper Peninsula
- Capital Area RHIO
- Flint Area
- Central MI
- Northern Lower
- Southeast
- Southwest
- West MI
- South Central

In 2008-2010 three initiatives that did not receive state funding became operational:
- My1HIE
- Jackson Community Medical Record
- Michigan Health Connect

Today there are four HIEs that are operational and locally sustained:
- Michigan Health Connect
- Capital Area RHIO
- My1HIE
- Jackson Community Medical Record

Two HIEs are in implementation:
- Upper Peninsula
- Southeast MI
State HIE Cooperative Agreement

- ARRA program Issued by the Office of the National Coordinator for HIT (ONC)
- $14.9 million over four years: 2010 – 2014
- Goal: interoperable statewide health information exchange
- Every state and territory received funding based on a formula

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Completion Date</th>
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</thead>
<tbody>
<tr>
<td>Convene Stakeholders for Planning Process</td>
<td>April 2010</td>
</tr>
<tr>
<td>Approved Strategic &amp; Operational Plans</td>
<td>December 2010</td>
</tr>
<tr>
<td>Implement governance structure</td>
<td>December 2010</td>
</tr>
<tr>
<td>All MI providers have at least one option for HIE</td>
<td>January 2012</td>
</tr>
<tr>
<td>Operational statewide connectivity</td>
<td>January 2013</td>
</tr>
<tr>
<td>Prepare for national connectivity</td>
<td>January 2014</td>
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</tbody>
</table>
MiHIN Nodes

Michigan Health Information Network

State of Michigan Internal HIE

Jackson Community Medical Record
MiHIN Shared Service Vision

- Long-Term Solution
- Aggregates data for research
- Supports “query” functionality
- Integrated platform
- Achieves later stages of Meaningful Use requirements (as proposed)
MiHIN Shared Services
Use Cases

Phase I

- Public Health Reporting
  - Send vaccines administered to MCIR
  - Send notifiable laboratory results to MDSS

- Push from sub-state HIE to sub-state HIE
  - Push laboratory results
  - Push of patient summary information (CCD)
Stage 1 Meaningful Use Public Health Reporting Data Flow

1. Send public health reporting message
   
2. Receive certified EHR’s public health reporting message
   
3. Validate message format & completeness
   
4. Validate provider exists within the MiHIN
   
5. Route public health reporting message through MiHIN messaging service
   
6. Validate message format & completeness, translate & transform message to intended systems requirement (HL7 to XML)
   
7. Validate Provider & Patient identity
   
8. Send message to appropriate MDCH system
   
9. Process message
   
10. Data quality checking, audit & logging
    
11. Generate data quality report & send to SoM HIE
    
12. Send Acknowledgment & data quality report
    
13. Route public health acknowledgment & data quality report through MiHIN messaging services
    
14. Send acknowledgment & data quality report to EHR
    
15. Receive public health reporting acknowledgement & data quality report

Certified EHR

Sub-state HIE

MiHIN

SoM HIE

MDCH
<table>
<thead>
<tr>
<th>System</th>
<th>Role</th>
</tr>
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</table>
| **CHAMPS (MMIS)** Community Health Automated Medicaid Processing System | 1. Medicaid EHR Incentive Enrollment  
2. Medicaid EHR Incentive Attestation  
3. Medicaid EHR Incentive Payments  
4. Eligibility Tracking |
| **Data Warehouse**                          | 1. Patient Identity Management  
2. EHR Incentive Monitoring and Meaningful Use Reporting |
| **MCIR** Michigan Care Improvement Registry | Stage 1 MU Objective: Capability to submit electronic data to immunization information systems in accordance with applicable law and practice |
| **MDSS** Michigan Disease Surveillance System | Stage 1 MU Objective: Capability to submit electronic data on reportable lab results and actual submission in accordance with applicable law and practice |
| **Syndromic** Michigan Syndromic Surveillance System | Stage 1 MU Objective: Capability to submit electronic syndromic surveillance data in accordance with applicable law and practice |
| **Bureau of Labs LIMS (STARLIMS)**         | Stage 1 MU Objective: Incorporate clinical laboratory tests into EHR as structured data |
“One” Test Submission Process

- Online test registration
- Test instructions provided
- Test submitted (HTTPS Post)
- Test analyzed pass/fail recorded
- Letter from Public Health Meaningful Use Coordinator e-mailed after completion of this process with pass/fail acknowledgement
- Follow-up submission instructions provided
## Meaningful Use Testing

### Key Project Metric:

<table>
<thead>
<tr>
<th>Meaningful Use Public Health Reporting as of 02/07/12</th>
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</thead>
<tbody>
<tr>
<td><strong># of Eligible Professionals/Hospitals Meeting MU for Public Health</strong></td>
</tr>
<tr>
<td>Hospitals</td>
</tr>
<tr>
<td>Providers</td>
</tr>
<tr>
<td>Grand Total</td>
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</tbody>
</table>

| **# of Eligible Professionals/Hospitals That Tested by System** | |
|---------------------------------------------------------------|
| Michigan Care Improvement Registry (MCIR) | 1470 |
| Michigan Syndromic Surveillance System (MSSS) | 12 |
| Michigan Disease Surveillance System (MDSS) | 2 |
| Grand Total | 1484 |
Cancer Surveillance and Health Record Messaging

- Review the Path Followed
  - Establish Key Pieces
  - Address Specific Needs
  - Engage Key Partners
- Inventory Accomplishments
  - Laboratory Reporting
  - Essential Software
  - Positioning
NAACCR Standards

- Standardized Case Definition
- Uniform Data Set
- Prescribed code sets
- Data Exchange Format
- Standardized Edit Rules
Pathology Reporting

- **Surveillance Challenge**
  - Key source of relevant data
  - Many states lack access
  - Regional and national Labs

- **Laboratory Interest**
  - General move to e-results
  - Strong interest in uniform solution across states
ePath Reporting

- Case Definition
  - ICD code and diagnostic text
- Data Set
- Coding Standard
- HL7 Message Defined and Approved
- Establish ePath Standards
  - NAACCR Standards Volume 5
Enabling ePath Reporting

- Work through ONC
- Collaborate with Vendors
- Demonstrate Prototype
  - IHE North America Connectathon
- National/regional laboratories
  - (Bostwick, Quest, CBLPath, Caris Labs)
- Implemented ‘Live’ ePath reporting
  - LabCorp to 28 state registries
  - Bostwick Lab. to 26 state registries
  - CBL Path Lab. to 7 state registries
ePath Project Participants as of February 15, 2012

- **Using PHINMS for Cancer Reporting (33 States)**
- **PHINMS installation for Cancer Reporting in Progress (5 States)**
- **Participation via sFTP or other methods (4 States)**
Managing Messages

- Receiver Needs a Message Translator
  - “Middleware”
- Various Products Available
  - Rhapsody
  - Some are costly and complex
- eMaRC Developed for this Purpose
  - Can be adapted to needs
NPCR-AERRO

- CDC NPCR Initiative
  - Sandy Jones - DCPC
- State Registry Collaboration
  - Extensive Involvement
- CDC Funding for Technical Support
  - Northrop Grumman
NPCR-AERRO Objectives

- Develop Electronic Reporting Model
  - Specific to Cancer Surveillance
  - Collaborative Process
- Promote Utilization of EHR
- Increase Electronic Reporting
- Standardize Electronic Data Exchange
NPCR-AERRO Approach

- Develop Consensus Model
  - Automating and Reporting
- Analysis and Design
  - Infrastructure / Technological Issues
  - Develop Products to Address Gaps
- Implementation
  - Engage Vendors, Facilities, States
  - Pilot Test Models and Products
NPCR-AERRO Models

- Hospital Operations
- Central Cancer Registry
- Cancer Control and Data Use
  - Clinic/Physician Office
EHR and Cancer Surveillance

- Case Definition
  - ICD code and diagnostic text
- Data Set
- Coding Standard
  - HL7 Message Defined and Approved
    - Piloting in Two States
      - (Kentucky, Missouri)
  - Establish EHR Reporting Standards
    - Drafted in June 0f 2011
Meaningful Use

- Cancer Case Reporting Proposed
  - Stage 2 criteria for Meaningful Use
- Proposed through ONC and CMS
  - Rule just posted to add cancer in Stage 2
- Approval Means Change
  - EHRs will want the Feature
  - Functionality will Help with Certification
- Work of NPCR-AERRO was Key
Eagle River Lighthouse
Getting Big in the Picture

- Need a Focus on EMR/EHR
  - NBDPN and CDC need to collaborate
- HL7/EHR Working Group
  - Working under SGSC
- Target Birth Defects Surveillance as a Stage 3 Meaningful Use
  - 2 year window
Just Getting Started

- Public Health Functional Profile
  - Specific Profile for Birth Defects
  - Scheduled for a Vote in Spring

- Proposed Meaningful Use Stage 3
  - ONC Health IT Policy Committee
  - NBDPN and CDC

- Proposed Birth Defects for Public Health Reporting Initiative
Much to Do

- Uniform Case Definition
  - Code and text
- Uniform Data Set
- Uniform Coding Standards
- Messaging Standard
- Vendor Engagement
- Handling Messages
- Managing Operational Changes
- Piloting and Implementation
Issues

- What Does All This Mean?
  - Does HIE change our vision or scope?

- Who can help?
  - Contact Marlene Anderka or Glenn Copeland
  - Respond to requests for input

- Where do we start?
  - We have a start under way.
How can we pull this off?

- Get Organized
- Set Priorities
- Get Involved
- Get Busy
- Seek Funding
Tahquamenon Falls